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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/790,226

03/02/2004

Tae Soo Park

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EXAMINER

DUDEK, JAMES A

ART UNIT

PAPER NUMBER

2871

MAIL DATE

DELIVERY MODE

09/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/790,226	Applicant(s) PARK, TAE SOO	
	Examiner /James A. Dudek/	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/5/07</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. “D” is the distance between the viewer and the flat panel. Since Applicant can't control the distance between the viewer and the flat panel and Applicant doesn't constantly adjust the lenses for the continuously changes distances between the viewer and the flat panel, it is unclear how one of ordinary skill would make a display following the formula claimed in claims 2 and 10.

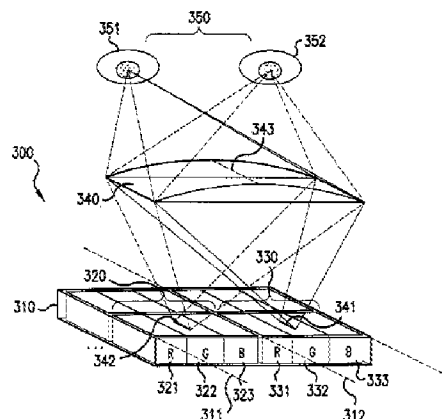
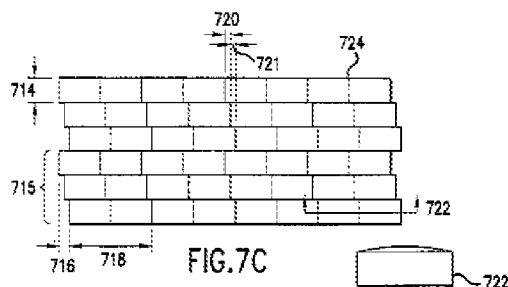
Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 7-9, 11, 13 and 15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 20030016444 A1.



Per claims 1 and 8-9, 444 teaches an apparatus for displaying a three-dimensional image, comprising: a flat display device displaying a plurality of perspective views from different directions [310]; and a lenticular lens sheet including a plurality of lenticular lens pieces of which Y-axis being parallel to a vertical axis of the flat display [see figure 7c above], the plurality of lenticular lens pieces forming a plurality of lines being parallel to a horizontal axis of the flat display device on a front surface of the flat display device [714], each of the plurality of lines being shifted to a predetermined distance [720].

Per claims 3 and 11, 444 teaches the apparatus for displaying the three-dimensional image of claim 1, wherein the predetermined distance in each line is changed according to a resolution of the three-dimensional image of which the viewer wants to describe [inherent since the dimensions and shift of lenses 722 must match the pixel pitch.]

Per claims 5 and 13, the apparatus for displaying the three-dimensional image of claim 1, wherein the parallax image is displayed in a horizontal direction of the flat display device [see figure 3].

Per claims 7 and 15, 444 teaches the apparatus for displaying the three-dimensional image of claim 1, wherein the flat display device is an LCD or a PDP [see paragraph 0088].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 6, 10, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over 444.

Per claims 2 and 10, teaches the apparatus for displaying the three-dimensional image of claim 1, but lacks the size of each lens piece of the lenticular lens sheet is $3 \text{ Width } (P_h) = 3.5 p (D - d) / 3 D$, $\text{Length } (P_v) = p (D - d) / D$, Wherein, (P: a length of a pixel in a horizontal direction, D: a distance between a viewer and the flat display device, d: a distance between the flat display device and the lenticular lens sheet) and lacks the predetermined distance in each line $1/6p$ (p: a length of a pixel in a horizontal direction). However, given the teachings of 444, this is merely a matter of design choice and optimization for improving sharpness of the image. Accordingly, it would have been obvious to one of ordinary skill at the time of invention.

Per claims 6 and 14, 444 teaches the apparatus for displaying the three-dimensional image of claim 1, but lacks the lenticular lens sheet being aligned at a predetermined distance from the flat display device so as to focus the flat display device on the image. However, it was well known to align the lens with the panel in order achieve optimal focus or sharpness. Accordingly, it would have been obvious to one of ordinary skill at the time of invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /James A. Dudek/ whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James A. Dudek/
Primary Examiner
Art Unit 2871